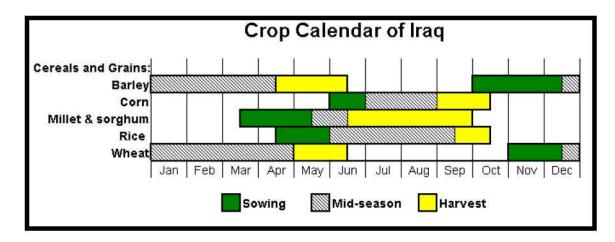
FAS – Office of Global Analysis (OGA) **United States Department of Agriculture (USDA) International Operational Agriculture Monitoring Program**



January Report - Week 2

January 15th, 2008

- 1. Season-to-date agro-meteorological data and evidence of early crop emergence indicate a significant improvement over the previous year's drought conditions, therefore the current winter grains (wheat & barley) production prospects in the northern rainfed provinces are better than the previous year (Figure 1). However, minimal rainfall events during late-December and early-January have inadequately maintained normal conditions and are currently < 50% of normal (Figure 2). If rainfall does not improve during the remainder of the winter growing period, a full production recovery from previous season drought conditions is unlikely.
- 2. The northern rainfed province of Ninawa normally accounts for an estimated 20 percent of total wheat production and over 30 percent of national barley production, but has received the least rainfall during the current season (Figure 3 - 7). The remaining northern rainfed provinces of Dahuk, Arbil, As Sulaymaniyah, At Ta'min and Salah ad Din received normal rainfall during the planting season, but the current lack of rainfall must improve if near normal production is to be achieved. These provinces roughly produce 20% of total wheat and 30% of total barley production.
- 3. The effect of adequate seasonal precipitation in the northern rainfed provinces is evidenced by a significantly higher Normalized Difference Vegetation Index (NDVI) than the previous year (Figures 8); crop emergence in Ninawa is not currently evident.
- 4. Multi-temporal AWiFS NDVI change analysis between January 7th, 2008 and January 7th, 2009 showed significantly less cropland cover in the predominantly irrigated southern provinces (Figure 8). Since seasonal rainfall was unusually high in this region, it is currently unknown if the lack of vegetation is due poor irrigation infrastructure or a delayed vegetation response. Further evidence will be available as the season progresses.



Cropland Seasonal Cumulative Precipitation: October 1st to January 10th

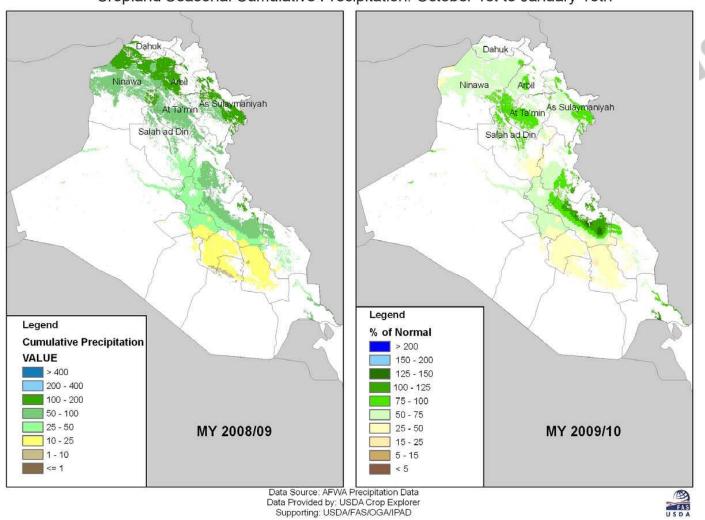


Figure 1: Season-to date cumulative precipitation and % of normal cumulative precipitation: MY 2009/10.

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Cropland Current Precipitation: January 1st to January 10th

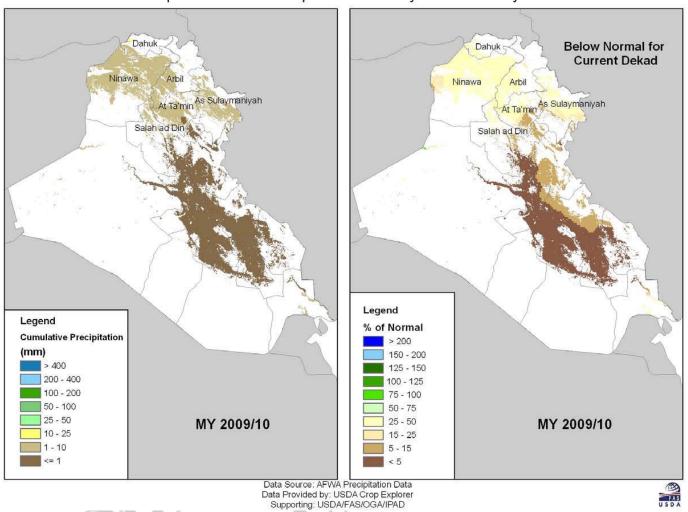


Figure 2: Current decadal cumulative precipitation and % of normal precipitation: MY 2009/10.

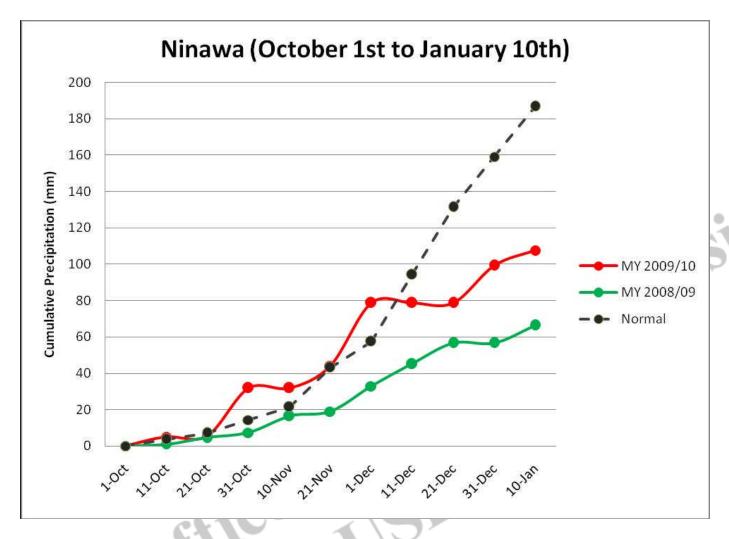


Figure 3: Season-to-date cumulative precipitation for Ninawa.

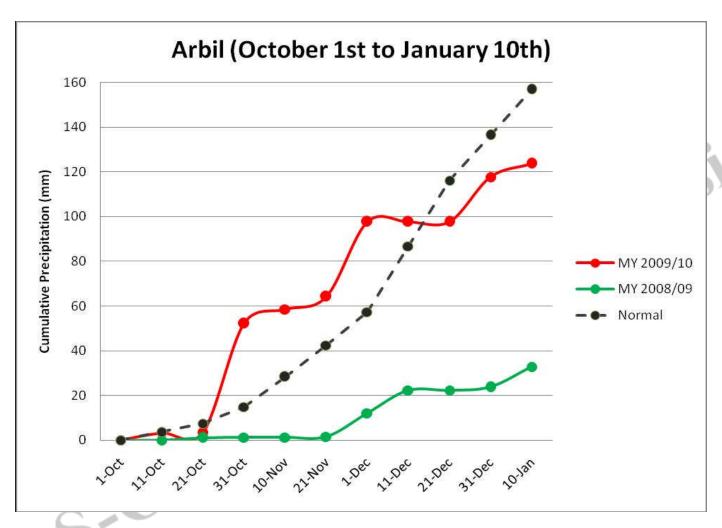


Figure 4: Season-to-date cumulative precipitation for Arbil.

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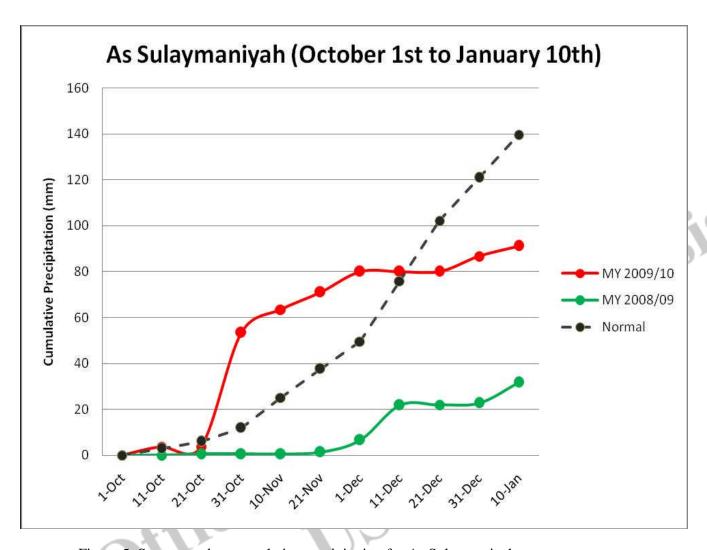


Figure 5: Season-to-date cumulative precipitation for As Sulaymaniyah.

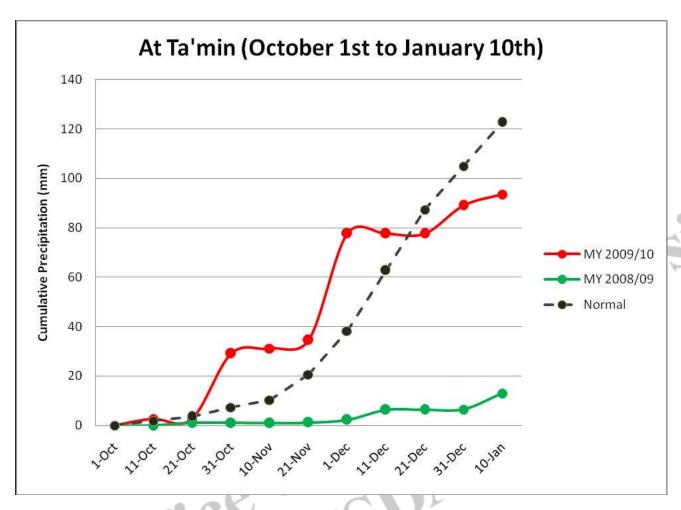


Figure 6: Season-to-date cumulative precipitation for At Ta'min.

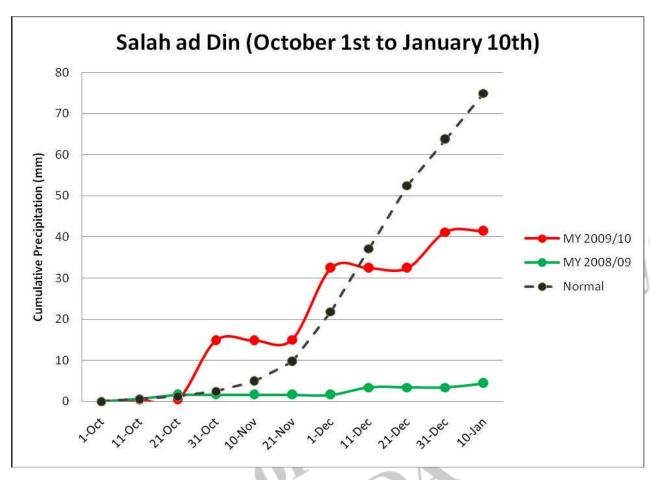


Figure 7: Season-to-date cumulative precipitation for Salah ad Din.

Cropland NDVI Change from Previous Year

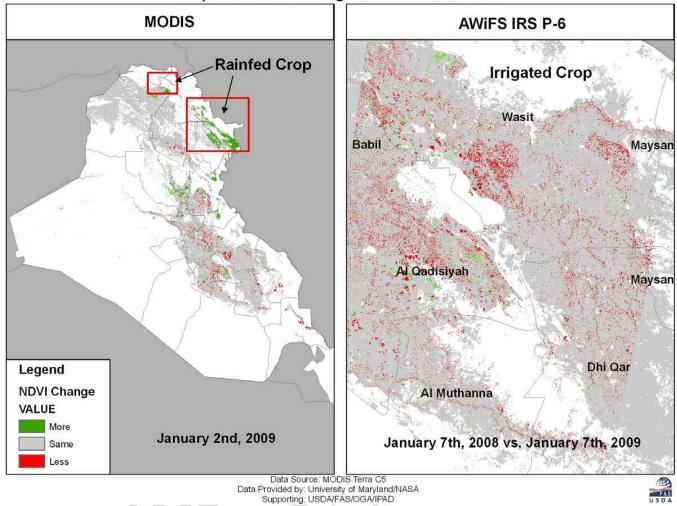


Figure 8: Multi-temporal NDVI change analysis

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